BIODIVERSITY & BIRDS CONSERVATION SURVEY RESEARCH AT BIRDS JUICEBAR PROJECT IN WESTERN MAHARASHTRA

A Synopsis Submitted to

स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड.

SWAMI RAMANAND TEERTH MARATHWADA

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By

Miss. Gaikwad Sneha Ramrao

(M.Sc, B.Ed., CTET, M.A.)
(RESEARCH SCHOLAR)

Under the Supervision of

DR. KIRAN S. SHILLEWAR
ASSISTANT PROFESSOR AND
HEAD, DEPARTMENT OF ZOOLOGY
SCIENCE COLLEGE, NANDED

RESEARCH CENTRE

SCIENCE COLLEGE, NANDED

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ABSTRACT OF PROPOSED WORK PLAN/PROBLEM :

1) Introduction :

Biodiversity refers to the variety of living species on Earth, including plants, animals, bacteria and fungi. Due to human activities, many species are being threatened with extinction putting biodiversity at risk. Climate change, pollution, population growth are all threats to biodiversity.

Biodiversity maintains ecosystem services needed to sustain drinking water supplies. It also plays a significant role in purifying water through continuous recycling of Water.

According to UNICEF, biodiversity loss can increase the incidence & distribution of certain infectious diseases. Studies shows that, 75% of all emerging diseases come from wildlife, including covid -19.

Deforestation drives wild animals out of their natural habitats and closer to humans & is linked to 31% of outbreaks such as Ebola, Zika and Nipah viruses.

2) Review of Literature & Development In The Subject :

"Birds Juicebar Project" started in 2020 in western Maharashtra. Those projects started at four places, out of those, three places are in Pune district & one place in Sangli District as following :

a) At Bhosalewadi, Undawadi village, Daund, District Pune.
b) At Pondhe village, Purandar, Dist. Pune.
c) At Mirawadi village, Daund, Dist. Pune.
d) At Agran Dhulgaon, Dist. Sangali

At "Undawadi village Birds Juicebar Project", we cultivate the plants, so that many birds get attracted at that place along with we have a benefit that there is a nearby pond . From that project for around 1km there is a Bhima river.

At "Pondhe village Birds Juicebar Project" nearby there is a lake & at "Mirawadi village Birds Juicebar Project", there is a river for around at 1km.

"As we know where the water is available there are more chances of living creatures at that location."

Those three projects are situated at such places where water availability is more due to which animals & birds habitat is more.

Undawadi project is around 6 to 7 acres under forest department. We planted more than 1000 Indian plants at this project. With the help of well, many plants got life due to drip irrigation system.

Presence of well, lake & river nearby that project there is no need to construct artificial ponds & if necessary then artificial ponds will be constructed for animals & birds.

In this project, Indian plant cultivated, so that food available to birds overall year.

3) Objectives of Research :

a) To preserve & enhance diversity of species.
b) Birds contribute to human health, improve agricultural production, generate ecotourism revenue & serve as indicators of environmental well-being.
c) To conserve birds.
d) To find different flora & fauna.
e) To maintain life-supporting systems & essential ecological processes.
f) Providing habitats, food & water to birds.
g) To increase pollination in nature with the help of birds.
h) To increase the number of migratory birds in the country.

4) Nature of Problem :

In contemporary situation, whole world & each & every living thing facing the problem of climate change & global warming.

Biodiversity loss leads to increase infectious diseases & destabilizes ecosystems. Hence project like “Birds Juicebar” are very essential to enhance biodiversity & to conserve enormous living species in nature.

Hypothesis :

Biodiversity & Birds Conservation are necessary to maintain living things which helpful for food chain & to achieve sustainable goals also.

Flora & Fauna are the main keystone of nature, hence with the help of birds juicebar project, we can increase biodiversity as well as increase habitat, food, water for different living species in nature. By increasing plantation, water scarcity crisis, flood problems, drought issues can be overcome and the issue like disaster can also be minimize or solve.

Indirectly it helps to improve human health also.

5) Research Methodology to be adopted :

The methods of research would be observative, identification, descriptive & comparative.

6) Importance of study/society application :

Birds Juicebar Project main motive is to enhance biodiversity which helps to conservation of essential ecological diversity to preserve continuity of food chains.

Such type of projects helpful to tackle the problems of climate change, health issues in human beings, water scarcity, drought crisis through plantation.

International Status :

According to **World Health Organization,** climate change affects the social and environmental determinants of healths per year, from malnutrition, malaria, diarrhea and heat stress.

Hence, if "Birds Juicebar Projects" would implement overall world then it definitely helpful to overcome climate change issue as well as different types of species would increase. So that biodiversity also expands.

National status :

According to **Down To Earth** magazine article by Ravi Shankar Behera, Neela Madhab Sahu, Ranjit K Sahu, "migratory birds are seasonal guests with positive impacts. Birds from 29 countries fly to India every year."

According to Government Of India,"1349 species of birds have been recorded as of 2019,of which 78 are endemic to the country and 212 species are globally threatened."

Migratory birds require nesting places & sufficient food for successful broods. With the help of "Birds Juicebar Project" number of birds will increase, because thorny trees and shrubs cultivated at this place. So that birds get natural food, water easily as well as they can build their nests by their own.

Significance of the study :

1) Certain regions become identified with certain species by migration of birds to and from specific sites. So, in future may be this project region would identify by certain species of migratory birds.
2) In nature, only birds are responsible for pollination, so, with the help of Birds Juicebar Project, this aim would be achieve.

3) In **Marathwada of Maharashtra state**, there is a big problem of water scarcity and drought issue . But, if such type of projects will start then plantation will increase and can overcome those problems. As well as, in Marathwada, most of the times, summer season get heated at maximum temperature. And because of less plantation, raining is also less. So, such projects can help to overcome those issues also.
4) Biodiversity will increase by increasing habitat of different species, because of natural food availability, thorny trees and shrubs. Hence such type thorny trees planted at this project like Katesawar plant and Jangali Badam plant.

7) Proposed work plan/formulation & structure of Study:

Introduction :

Birds are vital part of nature & there is a need to conservation of birds. Birds are the only one element of nature by which pollination occurs. With the help of birds, forest can be develop. So Birds conservation & enhance biodiversity is the main motive have to be achieve with the help of those Birds Juicebar. Projects.

In current situation ,due to disturbed ecological balance each and every life going to face many problems like climate change, global warming, natural disaster. But human intervention is the main cause to destroy natural habitat of birds and animals .so ,for food, water and shelter they are entering in human habitation. Hence, this project is to maintain natural habitat.

Under this project, Indian plants, some thorny plants ,shrubs as well as medicinal plants also cultivated, in 2020 so that different types of birds can make their nests & increases the birds species.

Year 1 :

During this project, in year of 2020 Indian plants get cultivated at four places, out of those, three places are in Pune district and one place is in Sangali district.

a) In Pune district, following three places were chosen for Birds Juicebar Project :

- ❖ Undawadi Village
- ❖ Pondhe village
- ❖ Mirawadi village

b) In Sangali district, one place were chosen which named as Agran Dhulgaon and near about 2500 trees were planted at that place.

Lake, drag, ponds, river are present nearby those projects, so, with the help of drip irrigation system, water provided to those plants regularly. Medicinal plants also cultivated.

In coming years, if there will necessity of artificial ponds then it will created definitely with the help of social organizations, public participation.

Year 2 :

Survey, data collection and identification would be done in this step.

During this Birds Juicebar Project, different types of birds, animals survey will be done with the help of some social organizations, rescue team such as ENVIRONMENTAL CONSERVATION ORGANISATION AT DAUND, EK MITRA EK VRIKSHA, AGRAN DHULGAON PANI FOUNDATION SANGALI, NISARGSAPARSH FOUNDATION SUPE, SWARAJYA SANKALPAK SHAHAJIRAJE BHOSALE PRATISHTHAN SOCIAL ORGANISATION SUPE, YUVA CHETANA SOCIAL ORGANISATION OF BARAMATI.

Year 3 :

At Pune district Birds Juicebar Project, medicinal plants could be utilize by research personnel, research centers ,so that new medicines could be develop for many diseases. Those projects also allow to zoologists, botanists ,so that they could find new species . It also allow to people and students for walking and study purpose ,hence it helps to live healthy and happy life with nature.

At Sangali District, this project are going to be helpful for farmers, because apiculture would start there. So farmers would also get benefit by agribusiness. It also allow tourist ,so ,in future it would be the identify as ecotourism place.

To increase number of migratory birds and different species, nests have to find in this project. Plantation will also increase with the help of public participation and social organizations, so that maximum number of birds, butterflies get attracted to that plants and they can make their nests as per their own and increase their habitat in that particular area, so, such birds number will

also be increase which are identified as endemic and which are going to be extinction because of pollution, climate change, global warming.

Conclusion :

This project final summarize the general conclusions of the research work. As well as ,it encompass the essence of the research work. It is the soul of the research work. Here this is going to deal with co-relation between nature and human life.

Birds Juicebar Projects would maintain ecological balance with the help of "MUTHBHAR DHANYA GHOTHBHAR PANI" concept. Those projects aware to make fond off nature in our society.

According to population in India, youths are more, so, there is a necessity of increasing interest in youths mind and with the help of such projects young generation also going to be participate in it as well as awareness sessions organizes in society so that maximum plantation would be done on barren land.

8) References :

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c) The book of Indian Birds by Salim Ali.
d) Conserving Biodiversity : A Research Agenda for Development Agencies by National Academies.
e) Birds conservation by Stanley A. Temple.
f) Introduction to ornithology by John Faabarg.
g) Birds Juicebar project at Pune & Sangli.
h) Ek Mitra, Ek Vriksha Social Organization, Pune.
i) Agran Dulgaon Pani Foundation Social Organisation at Sangli.

Research Student

Miss.Gaikwad Sneha Ramrao

Research Guide

Dr.Kiran S. Shillewar
Assistant Professor and Head, department of zoology
Science college, Nanded

Date :

Place :